



### Who are We?

WeBrass Technology Pvt Ltd is poised to revolutionize the industry. Our deep expertise in consulting and advising distilleries on optimizing manufacturing processes with cutting-edge technology has consistently delivered improvements in accuracy, speed, and agility.

Headquartered in Pittsburgh, with offices in London, Bangalore, Gwalior, and Budapest, our team of over 50 professionals has more than 20 years of global experience across cloud computing, cyber security, networking, workforce transformation, and IT infrastructure. Our leadership in automation, AI, and cyber security is pivotal to unleashing the full potential of Gen-5 industrial ethanol plants, ensuring that production is not only safer and greener but also more profitable.







# **MESSAGE FROM**

Eric Bedell

CEO, WeBrass Technology Pvt. Ltd



"Our experience collaborating with leading IT providers has revealed opportunities for greater efficiency and impact, which we continually strive to achieve for our customers."



Industrial Revolution, We call it as Ethanol 4.0











### 1784

#### Industry 1.0

- · Steam engine
- · Weaving looms
- Mechanics

### 1870

#### Industry 2.0

Assembly lines

- · Electricity
- · High-volume production

### 1969

### Industry 3.0

- · Computerization
- · Electrical devices
- · Automation

### **Today**

#### Industry 4.0

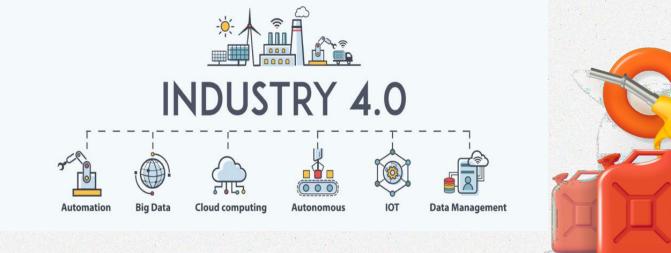
Internet connection

- Device data acquisition
- · Data analysis
- Simulation





Industrial Revolution, We call it as Ethanol 4.0



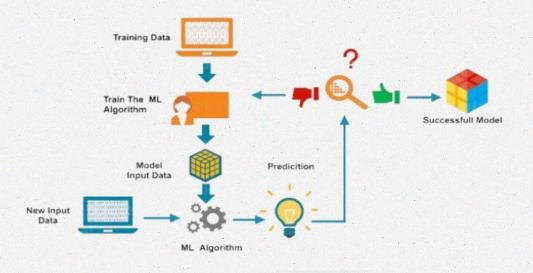






# **Al driven Quality Control**

- •AI algorithms correlate quality data with production parameters
- Automated sampling systems integrated with AI analysis for continuous monitoring









# Al driven CyberSecurity

- •Al-driven network traffic analysis using deep learning and behavioral analytics
- Automated threat intelligence gathering and integration
- Machine learning algorithms for anomaly detection in both IT and OT networks
- •Al-powered simulation of cyber attacks for proactive defense improvements
- •Automated patch management and system updates guided by AI risk assessment

# The benefits of automating Al in cybersecurity:



Ongoing learning

Improved vulnerability

management



Discovering unknown threats



Enhanced overall security posture



Vast data volumes



Better detection and response







Life Cycle Assessment (LCA) - Supply Chain mgmt. (ERP+CRM)
In house light & robust tool to manage You ERP+CRM requirements



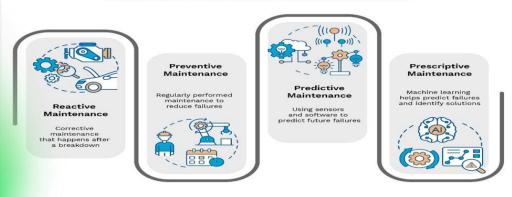






- Predictive detections/Lower Downtime)
- •High-frequency IoT sensors installed on key equipment (e.g., fermenters, distillation columns, centrifuges)
- •Data collected includes vibration patterns, temperature fluctuations, pressure changes, and energy consumption
- Machine learning models predict potential failures and estimate remaining useful life of components

### What is Predictive Maintenance?



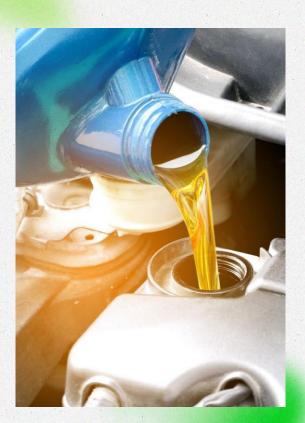






Process Optimization

#### The Benefits of Digital Process Automation % Reduced Human Easier to Improved Data Reduced Labor Costs Errors Change Size After the initial cost to Digital Process Automation helps purchase the appropriate Human errors are bound to occur companies perform more efficient While companies who must hire technology companices when tasks are automated with operations which results in more or terminate employees have a often realize a significant some statistics estimating that a much longer time changing size, accurated data. As a result companies person makes 10 errors out of reduction in labor costs. Digital Process Automation helps who use Digital Process Automation every 100 steps, but Digital are more likely to obtain better companies to change size much Process Automation helps to avoid results to study for analytics. more quickly. errors altogether because a Integration Improved Productivity Time to Focus on Digital Process Automation Many business trends are inching Other Efforts towards collaboration between all helps companies perform the Digital Process Automation helps aspects of a company. From sales to same task at a faster rate, companies use technology to which menas that companies marketing services. Dogotal Process achieve tasks, which frees upare able to perform the same Automation helps companies to time to focus on other important tasks with less errors ata a begin the process of integrating efforts regarding business verious company functions.







Process Optimization – Predictive Final Outcome

100/Liters Rs - 100 KLPD - Future 1.2rs

Raw Material – 45% - >> Rice/Maze/Yeast/corn/ Maintenance - 12% People – 32% Logistic – 11%

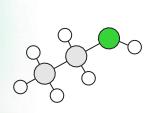
1st Year – 100 Rs/lts 2nd Year – 94 Rs/ltr 3rd Year – 87 Rs/ltr 4th Year – 82 Rs/ltr 5th Year – 79 Rs/ltr











# Thank You



